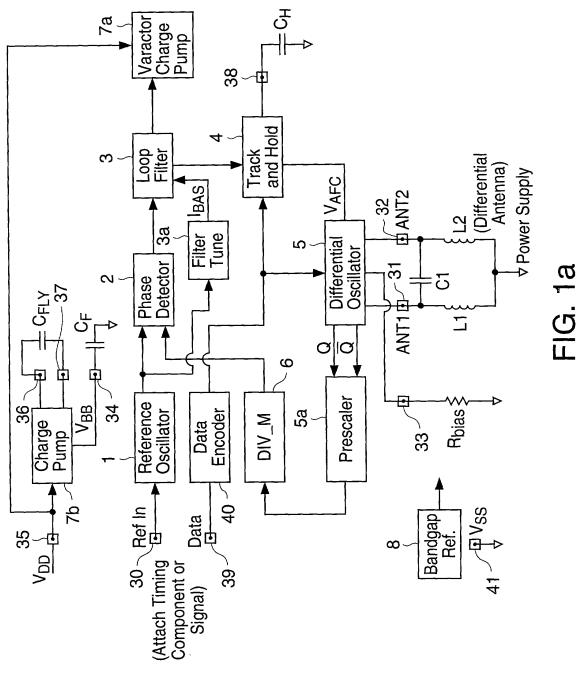
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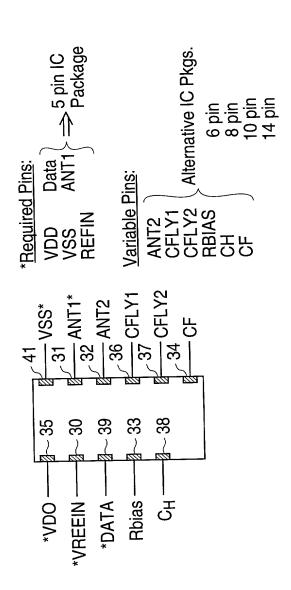
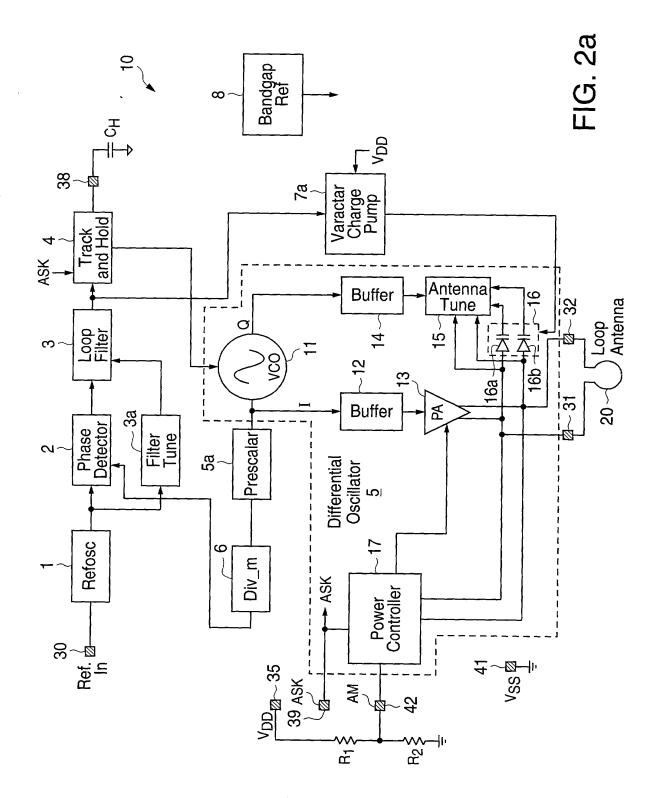


FIG. 1b

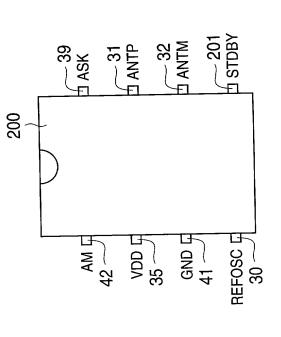
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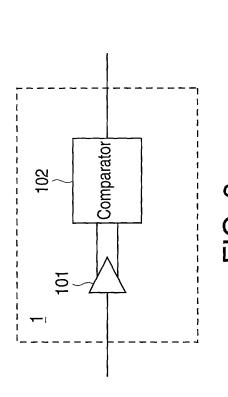
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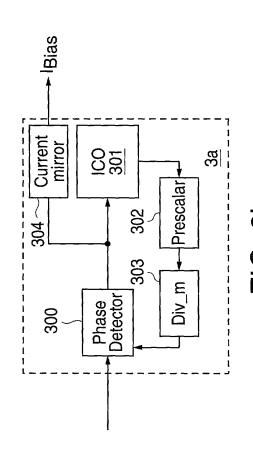
FULLY INTEGRATED, ALL CMOS ASK/AM TRANSMITTER WITH AUTOMATIC ANTENNA TUNING CONNECTION PIN DIAGRAM FOR THE INVENTION



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Inventors: Joseph Elder
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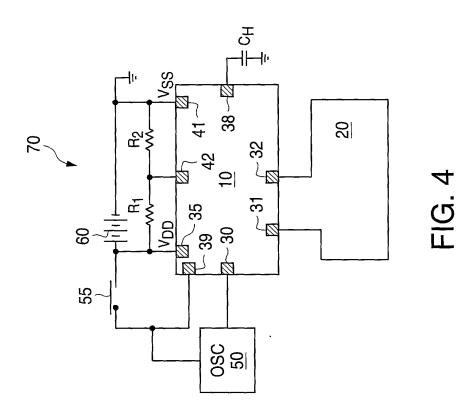
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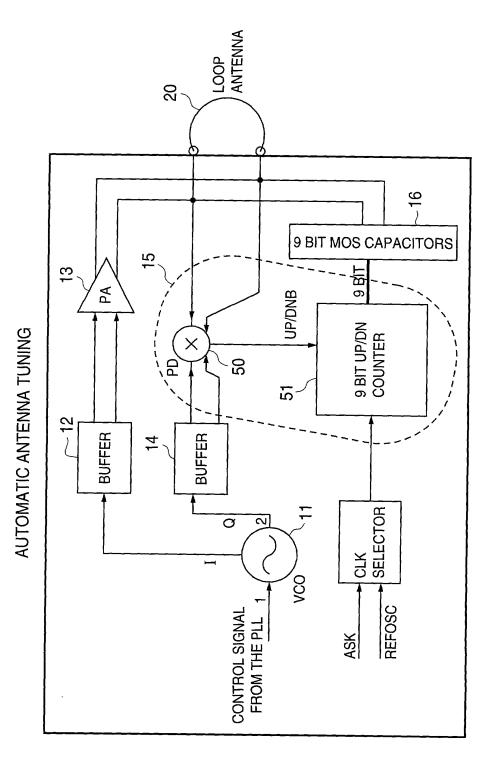


FIG. 5a

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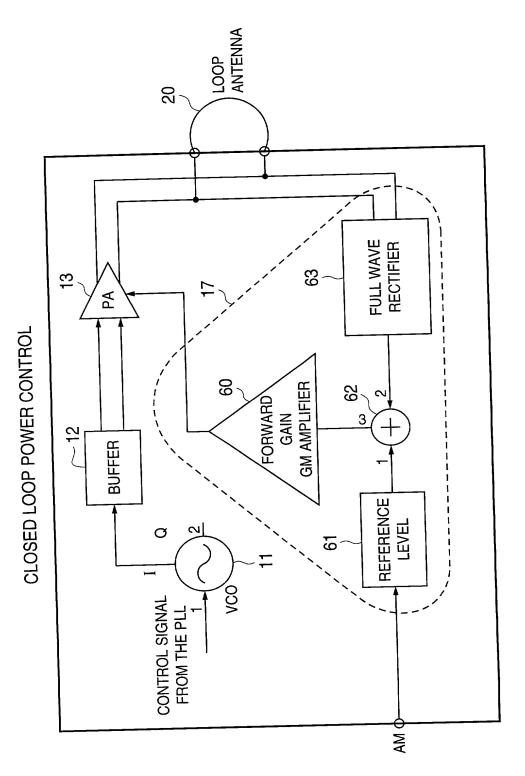
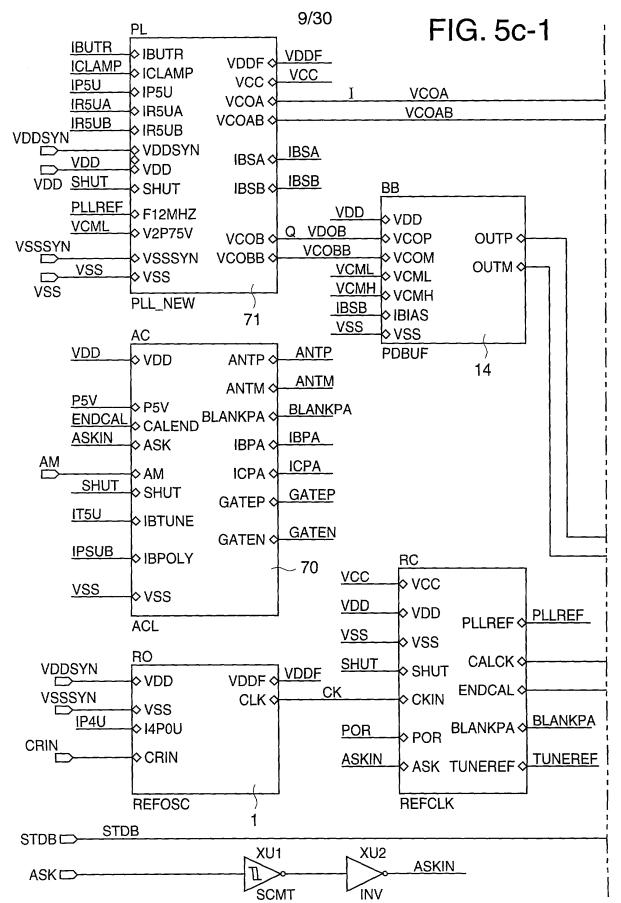


FIG. 5b

Title: "Fully Integrated All-CMOS...." Inventors: Joseph Elder

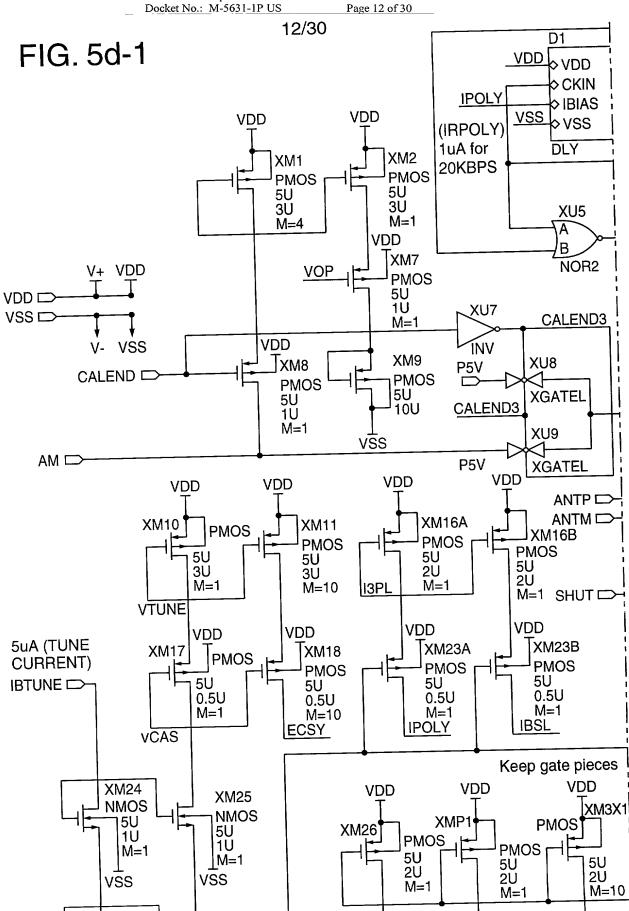
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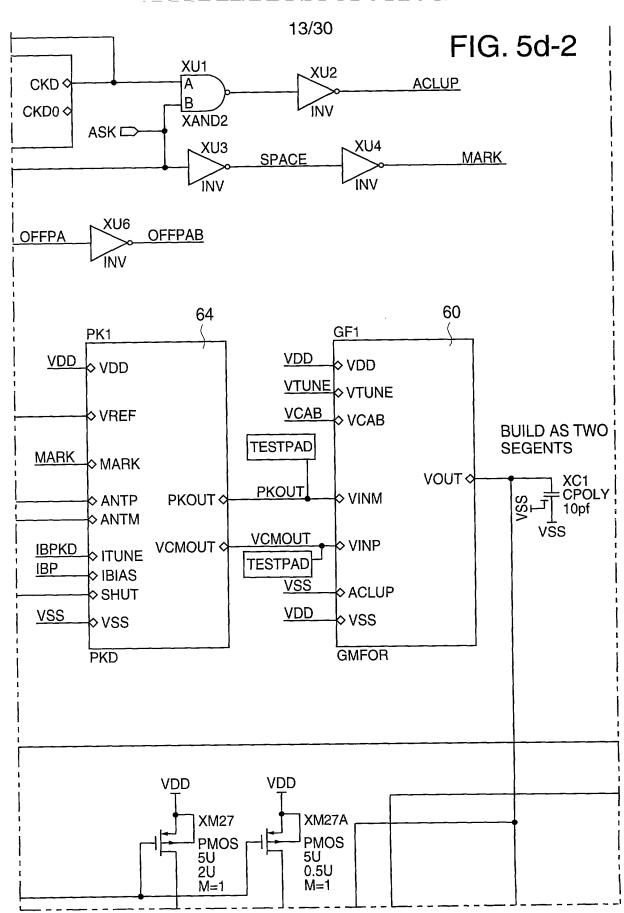


Title: "Fully Integrated All-CMOS...." Inventors: Joseph Elder Docket No.: M-5631-1P US Page 10 of 30 PA BA <u>VDD</u> -12 ♦ VDD **VDD** ♦ VDD **VCOAS ANTP** ♦ INP OUTP < ANTP < ♦ VCOP ANTM **VCOABS** ANTM < ♦ VCOM > INM OUTM < **VCML** ♦ VCML **VCMH** ◇ VCMH **IBPA** ♦ IBIAS **IBSA** ♦ IBIAS **ICPA** ♦ IVCAS **VSS** -13 ♦ VSS **VCMPA** ♦ VCM **PABUF** <u>VSS</u> ♦ VSS **GATEP** GATEP GATEN GATEN PA BR PC **VCMPA VCMPA VCMH** ♦ VCMH VDD > VDD **VSS VCML** ♦ VSS ◇ VCML IP4U **ANTPIN ♦** IP4U < IP15UC ♦ IP15U <u>IR5UA</u> ANTMIN ◊ IR5UA < IR5UB <u>IB1P25U</u> ♦IB1P25U IR5UB < **ANTP VCOBS** ANTP ♦ ♦ VCOB P5V ANTM_ V0P5V ◊ VCC ANTM \$ IP5U > VCC IP5U < ASKIN ♦ ASK IP5UB IP5UB < IB1P25U <u>POR</u> MARK ❖ ◇ POR IB1P25U < **STDB** STDB IP3P5U < SPACE < CALCK IR2P5U ¢ **ENDCAL** SENDCAL IP15UC 115UC ◊ VSSSYN VSS <u>POR</u> **PCL PORST** 54 SHUT SHUT < **BIASREF** V+ VDD VDD 🗀 VSS □ FIG. 5c-2 V- VSS

Inventors: Joseph Elder Docket No.: M-5631-1P US Page 11 of 30 ANTP C ANTM 10 <□ ANTPIN ✓ ANTMIN TU VDD ♦ VDD <u>VCC</u> <u>ICLAMP</u> ICLAMP ♦ TUNEREF F760KHZ FIG. 5c-3 IT5U IBUTR ♦ >IPOLY ⊳IRWELL VSS ⊳vss SHUT 50-2 50-3 50-1 TUNE760K FIG. FIG. FIG.

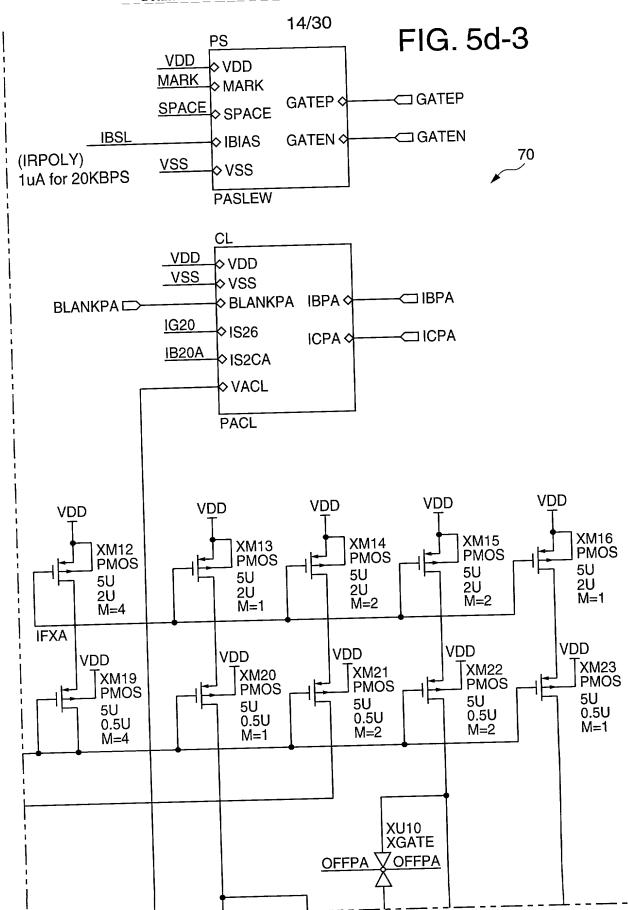
Title: "Fully Integrated All-CMOS...."





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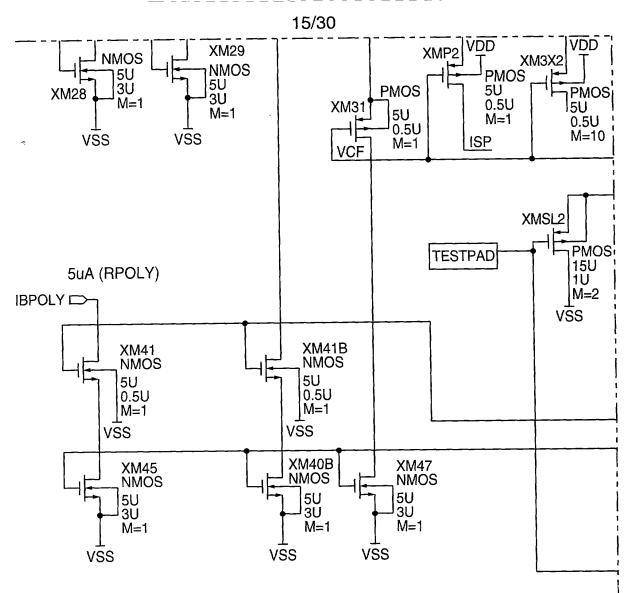


FIG. 5d-4

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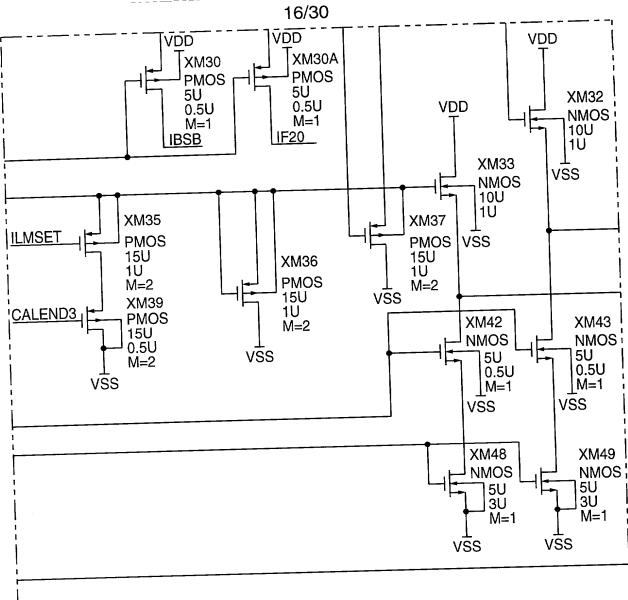
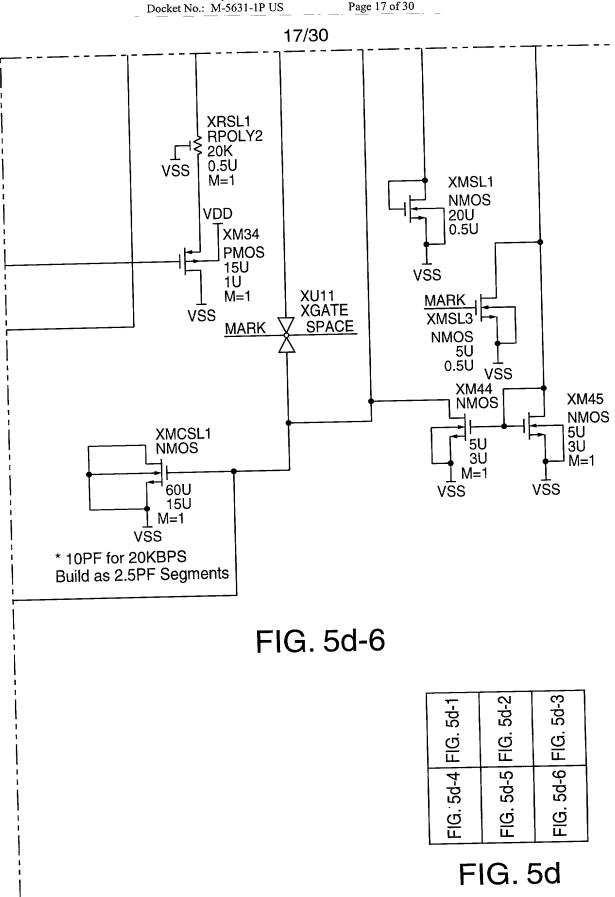
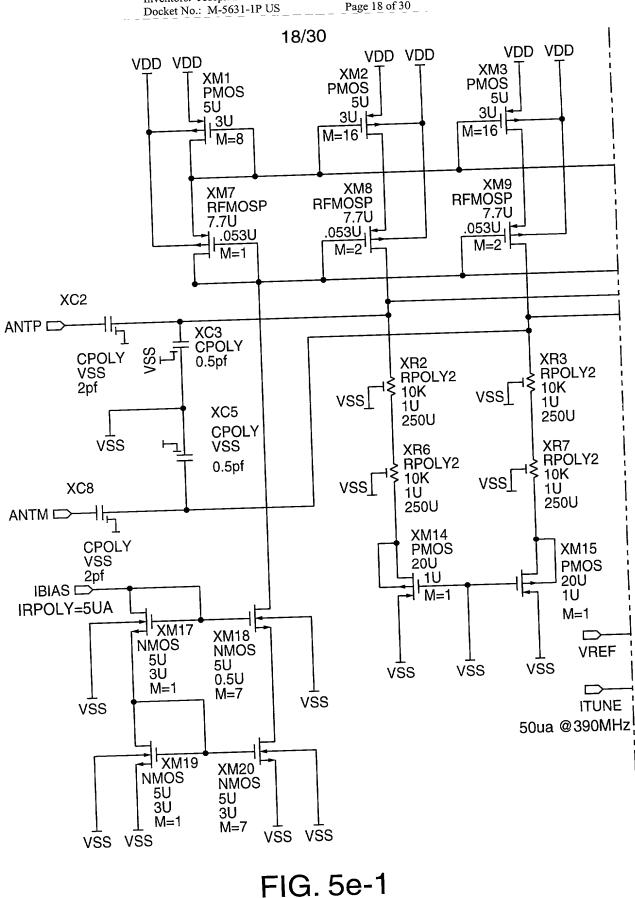
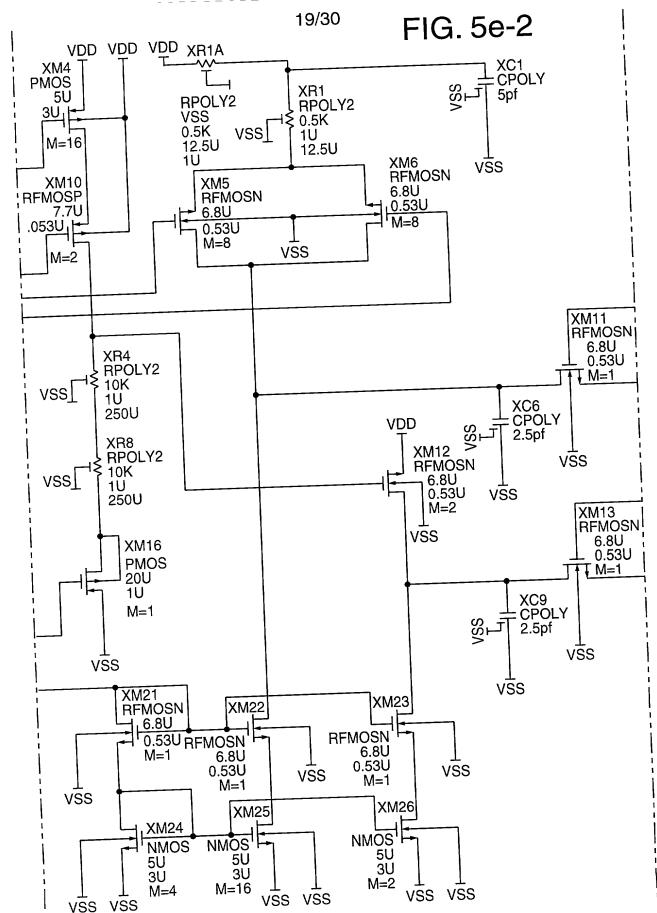


FIG. 5d-5



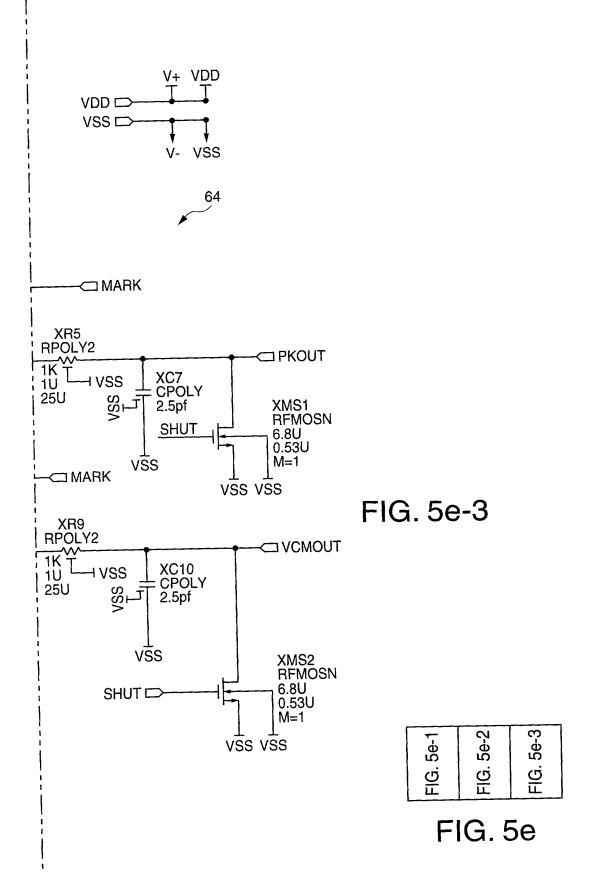


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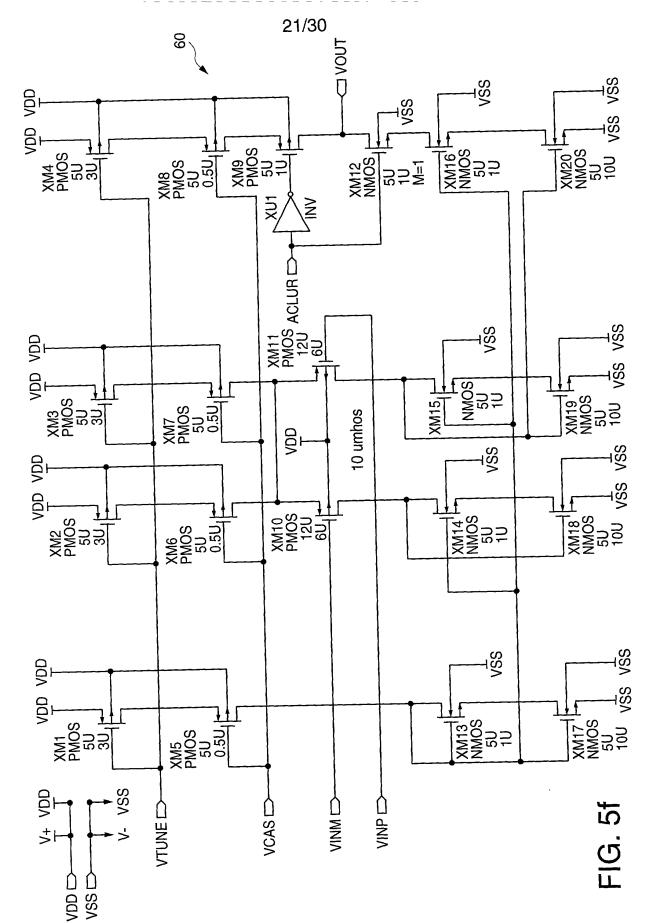
Inventors: Joseph Elder

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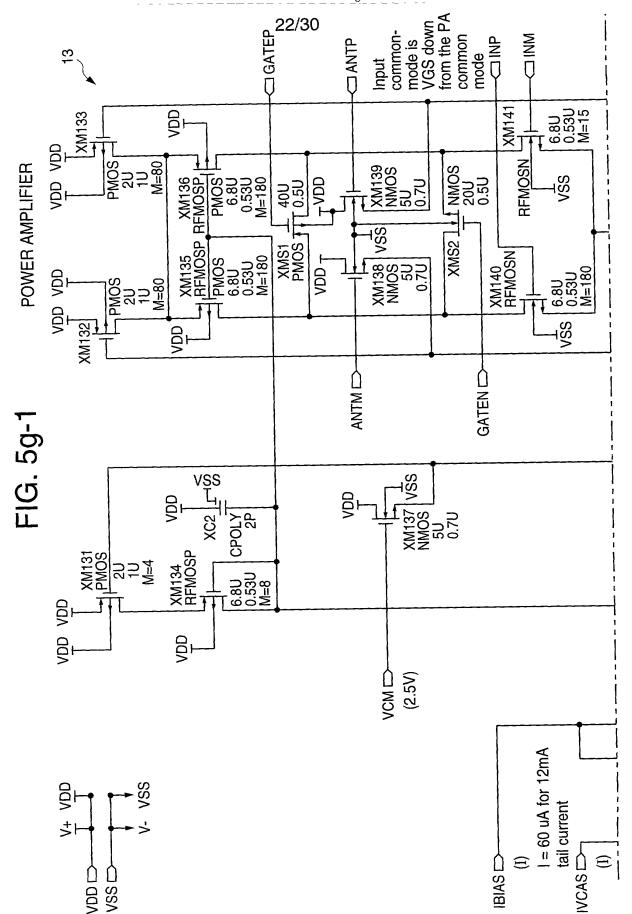
Inventors: Joseph Elder

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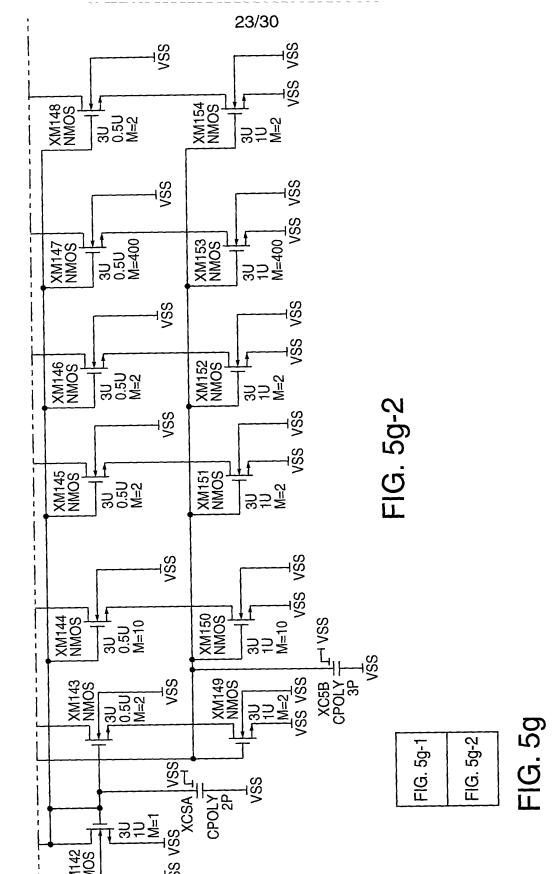
Inventors: Joseph Elder Docket No.: M-5631-1P US

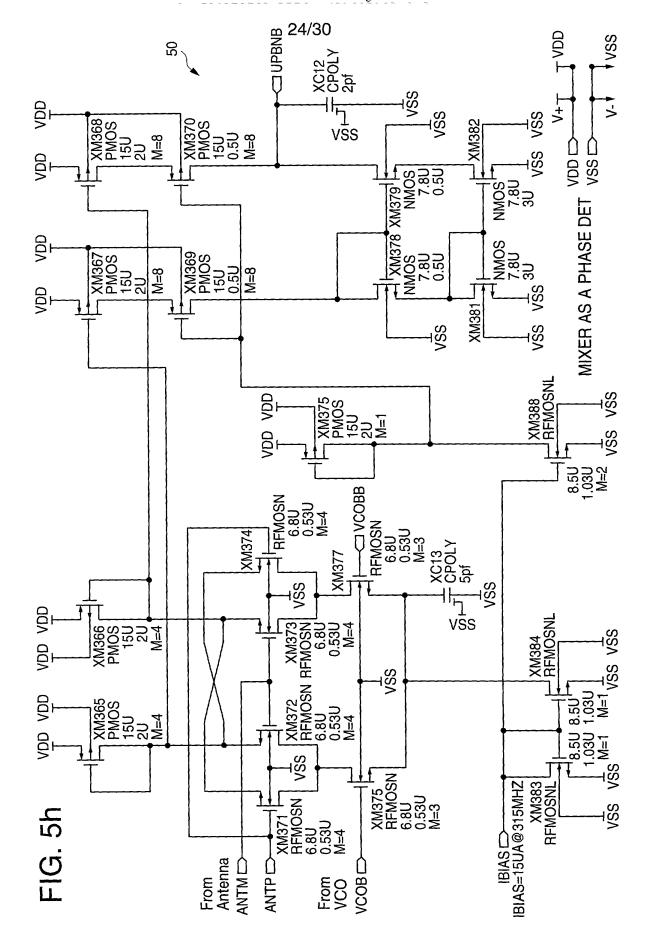
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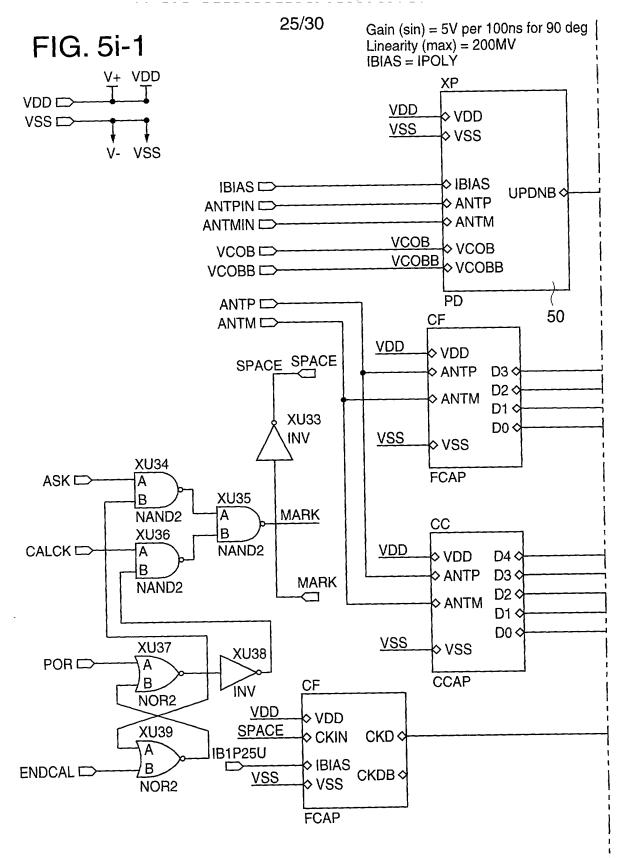
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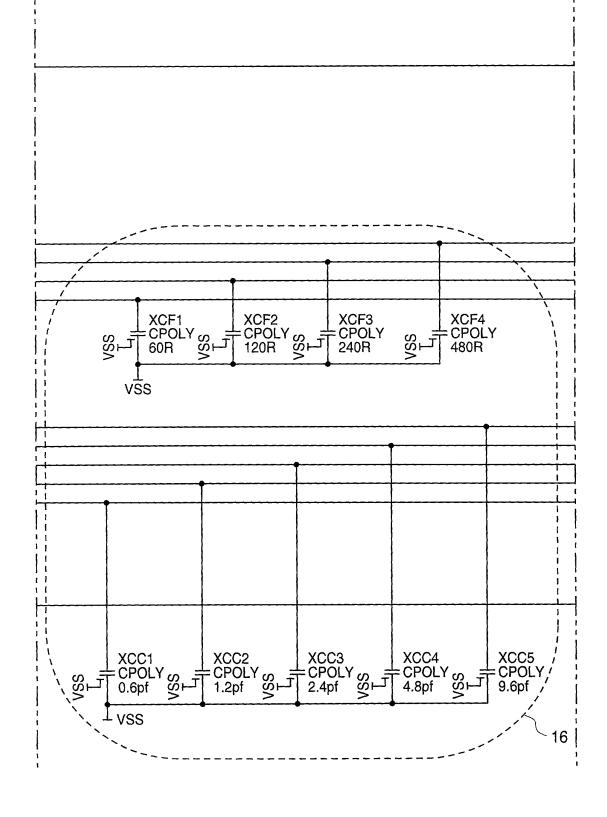
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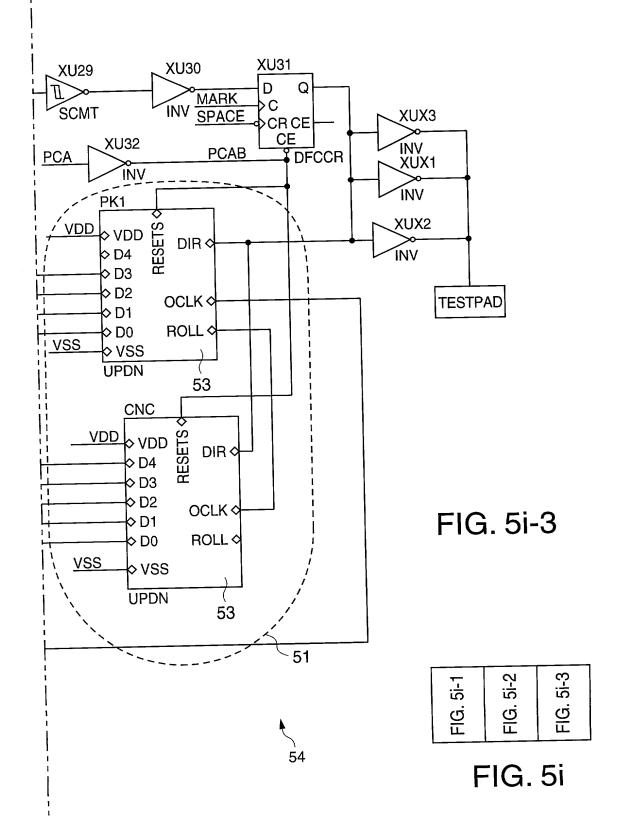
FIG. 5i-2



Title: "Fully Integrated All-CMOS...."

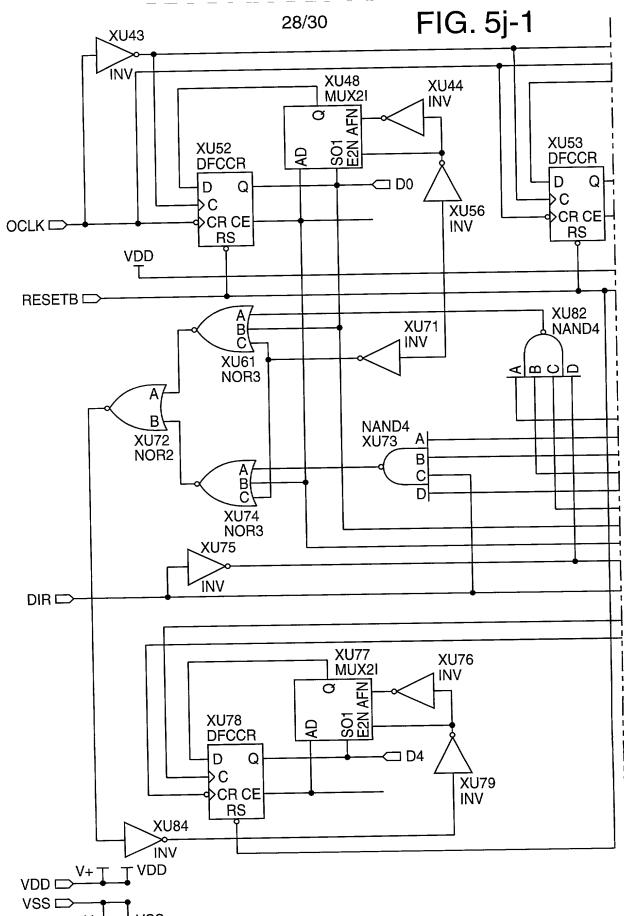
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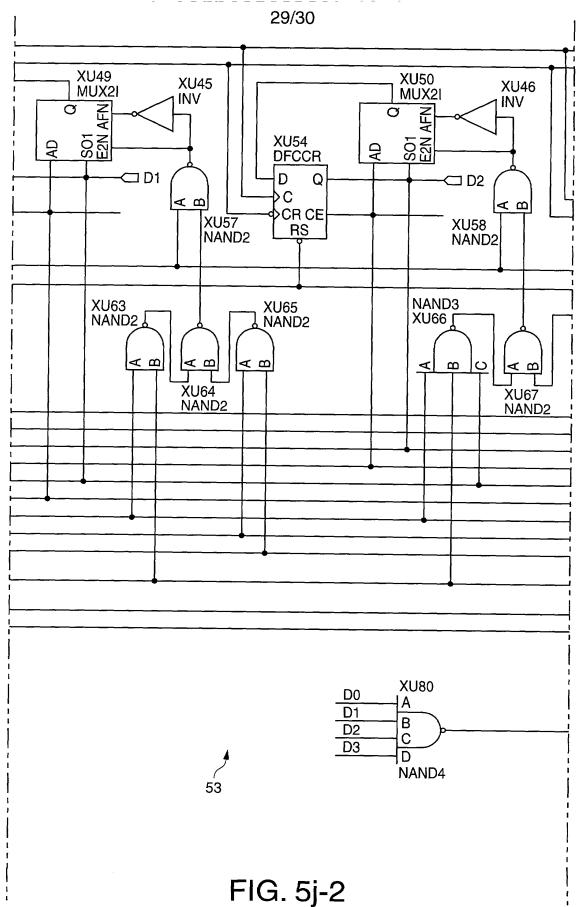
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